ABB MEASUREMENT & ANALYTICS | DATA SHEET

GLA132-GGA

Greenhouse gas analyzer - Ultraportable

Precise, accurate and rugged analyzers for measurement of CH_4, CO_2 and H_2O in ambient air.

Measurement made easy

OA-ICOS™ GLA132-GGA Greenhouse gas analyzer - Ultraportable

Features and benefits

- Simultaneous measurements of CH_4, CO_2 and H_2O
- Measurement rates selectable up to 1 Hz
- Extremely wide dynamic/linear range
- Highly specific: robust to cross-interferences
- State-of-the-art stability and precision
- Installed and operational in minutes
- Unsurpassed reliability
- Real-time diagnostics

Overview

The ABB laser-based gas analyzers build on the heritage and extensive track record of Los Gatos Research analyzers, using patented Off-Axis Integrated Cavity Output Spectroscopy (OA-ICOS™) technology, the latest evolution in tunable diode laser absorption spectroscopy.

ABB's Ultraportable greenhouse gas analyzer reports measurements of methane, carbon dioxide and water vapor simultaneously in a compact, crushproof and travel-friendly analyzer.

As with all OA-ICOS analyzers, the GLA132-GGA is fast and simple to use which makes it ideal for field studies, compliance monitoring, air quality studies and soil flux studies, and wherever sensitive measurements of greenhouse gases are needed.

… Overview

The GLA132-GGA begins recording data within 20 seconds after power on so users do not have to wait for a long warm-up period for the system to thermally equilibrate.

ABB's patented OA-ICOS technology, a fourth-generation cavity enhanced absorption technique, has many advantages over older, conventional and delicate cavity ringdown spectroscopy and direct absorption techniques. ABB analyzers are easy to operate and robust, thus providing users with higher performance and reliability at minimal operating costs.

The GLA132-GGA has an internal computer that can store data practically indefinitely (for applications requiring unattended longer term operation), and send real-time recordings to a data logger through its analog and digital (RS-232) outputs. The analyzer includes control and analysis software.

Accessories & Options

ACC-UP-BP	**Backpack Harness for Ultraportable Analyzers**
ACC-DP3H	**3-head external pump for faster response time**
OPT-EXTENDED-CH4	**Extended CH_4 concentration range option** Extends the linear range of methane for higher concentrations in ambient air. *H_2O measurement specification is valid when CH_4 is bellow 500ppm
OPT-DATALOG	**Digital Data Logging Capability** Multi-channel data logging option records and synchronizes serial (RS-232) outputs from multiple ABB analyzers and other devices (GPS, anemometers)

*Contact your sales representative for more accessories, maintenance kits and options, per product series.

Ordering information

- **OA-ICOS™ GLA132-GGA**

Greenhouse gas analyzer - Ultraportable

Specifications

Precision (1σ, 1 sec / 10 sec / 100 sec):

CH_4: 1.4 ppb / 0.5 ppb / 0.2 ppb
CO_2: 300 ppb / 100 ppb / 30 ppb
H_2O: 50 ppm / 20 ppm / 10 ppm

Linear measurement ranges:

CH_4: Up to 100 ppm
CH_4: Up to 1% (with extended range option)
CO_2: Up to 20,000 ppm
H_2O: Up to 30,000 ppm

Operational ranges:

CH_4: Up to 1000 ppm
CH_4: Up to 1% (with extended range option)
CO_2: Up to 3%
H_2O: <99% relative humidity, non-condensing

Measurement rate:

0.01 – 1 Hz (user selectable)

Flow response time:

<8 seconds (1/e)
<2 seconds (1/e) with ACC-DP3H external pump

Communication:

Serial RS232, USB (×2), AO (16-bits, 0 to 5 V DC), Ethernet LAN connection, VGA display, MIU, WiFi 802.11 b/g/n, 300 Mbps

Power:

60 W (11–30 VDC)
66 W (100–240 VAC, 50/60 Hz)

Dimensions (H × W × D):

18 × 47 × 36 cm (7 × 18.5 × 14 in)

Weight:

16.9 kg (37.3 lb)

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